

U.S. Department of Commerce, Patent and Trademark Office					Atty Docket No.		Serial No.	
					2003-0083-01		10/798,740	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					Applicant(s)			
(Use several sheets if necessary)					William N. Partlo, et al.			
					Filing Date		Group	
					March 10, 2004		<del>Unassigned</del> 2881	

  

U.S. Patent Documents							
*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
len	A 2,759,106	8/14/56	Hans Wolter	250	53		
	B 3,150,483	5/10/62	Mayfield, et al.	60	35.5		
	C 3,232,046	2/1/66	Rudolf Meyer	50	35.5		
	D 3,279,176	10/18/66	Robert H. Boden	60	202		
	E 3,746,870	7/17/73	Donald M. Demarest	250	227		
	F 3,960,473	6/1/76	Thomas Harris	425	467		
	G 3,961,197	6/1/76	John M. Dawson	250	493		
	H 3,969,628	7/13/76	Roberts, et al.	250	402		
	I 4,042,848	8/16/77	Ja Hyun Lee	313	231.6		
	J 4,088,966	5/9/78	Michael A. Samis	313	231.5		
	K 4,143,275	3/6/79	Mallozzi, et al.	250	503		
	L 4,162,160	7/24/79	Gerald J. Witter	75	246		
	M 4,203,393	5/20/80	Dante S. Giardini	123	30		
	N 4,504,964	3/12/85	Cartz, et al.	378	119		
	O 4,536,884	8/20/85	Weiss, et al.	378	119		
	P 4,538,291	8/27/85	Seiichi Iwamatsu	378	119		
	Q 4,596,030	6/17/86	Herziger, et al.	378	119		
	R 4,618,971	10/21/86	Weiss, et al.	378	34		
	S 4,626,193	12/2/86	Ronald A. Gann	431	71		
	T 4,633,492	12/30/86	Weiss, et al.	378	119		
len	U 4,635,282	1/6/87	Okada, et al.	378	34		

  

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	

  

Examiner <i>len</i>	Date Considered <i>8-14-06</i>
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EW	V	4,751,723	6/14/88	Gupta, et al.	378	119		
	W	4,752,946	6/21/88	Gupta, et al.	378	119		
	X	4,837,794	6/6/89	Riordan, et al.	378	119		
	Y	5,023,897	6/11/91	Neff, et al.	378	122		
	Z	5,027,076	6/25/91	Horsley, et al.	324	674		
	AA	5,102,776	4/7/92	Hammer et al.	430	311		
	BB	5,126,638	6/30/92	Rolf Dethlefsen	315	326		
	CC	5,142,166	8/25/92	Daniel L. Bix	307	419		
	CC	5,313,481	5/17/94	Cook et al.	372	37		
	DD	5,319,695	6/7/94	Itoh, et al.	378	84		
	EE	5,411,224	5/2/95	Dearman, et al.	244	53		
	FF	5,448,580	9/5/95	Bix et al.	372	38		
	GG	5,504,795	4/2/96	Malcolm McGeoch	378	119		
	HH	5,729,562	3/17/98	Bix et al.	372	38		
	II	5,763,930	6/9/98	William N. Partlo	250	504		
	JJ	5,866,871	2/2/99	Daniel L. Bix	219	121		
	KK	5,936,988	8/10/99	Partlo et al.	372	38		
	LL	5,963,616	10/5/99	Silfvast, et al.	378	122		
	MM	6,031,241	2/29/00	Silfvast, et al.	250	504		
	NN	6,039,850	3/21/00	Stephen C. Schulz	204	192.15		
EW	OO	6,172,324	1/9/01	Daniel L. Bix	219	121.57		
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len	PP	6,051,841	4/18/00	William N. Partlo	250	504		
	QQ	6,064,072	5/16/00	Partlo, et al.	250	504		
	RR	6,195,272	2/27/01	Joseph E. Pascente	363	21		
	SS	6,285,743	9/4/01	Kondo, et al.	378	119		
	TT	6,307,913	10/23/01	Foster, et al.	378	34		
	UU	6,377,651	4/23/02	Richardson, et al.	378	34		
	VV	6,396,900	5/28/02	Barbee, Jr., et al.	378	84		
	WW	6,452,199	9/7/02	Partlo, et al.	250	504		
	XX	6,493,123	12/10/02	Theodorus Bisschops	378	119		
	YY	6,566,667	5/20/03	Partlo, et al.	250	504		
	ZZ	6,566,668	5/20/03	Rauch, et al.	250	504		
	AA	6,576,912	6/10/03	Visser, et al.	250	492.2		
	AB	6,586,757	7/1/03	Melnychuk, et al.	250	504		
	AC	2001/0055364	12/27/01	Kandaka, et al.	378	119		
	AD	2002/0009176	1/24/02	Ameniya, et al.	378	34		
	AE	2002/0100882	8/1/02	Partlo, et al.	250	504		
	AF	2002/0141536	10/3/02	Martin Richardson	378	119		
	AG	2002/0163313	1/9/03	Ness, et al.	315	111.01		
	AH	2002/0168049	11/14/02	Schriever, et al.	378	119		
	AI	2003/0006383	1/9/03	Melnychuk, et al.	250	504		
	AJ	2003/0068012	4/10/03	Ahmad, et al	378	119		
len	AK	2003/0219056	11/27/03	Yager, et al.	372	57		
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
len	AL	Apruzese, J.P., "X-Ray Laser Research Using Z Pinches," <u>Am. Inst. of Phys.</u> 399-403, (1994).						
	AM	Bollanti, et al., "Compact Three Electrodes Excimer Laser IANUS for a POPA Optical System," <u>SPIE Proc.</u> (2206)144-153, (1994).						
	AN	Bollanti, et al., "Ianus, the three-electrode excimer laser," <u>App. Phys. B (Lasers &amp; Optics)</u> 66(4):401-406, (1998).						
	AO	Braun, et al., "Multi-component EUV Multilayer Mirrors," <u>Proc. SPIE</u> , 5037:2-13, (2003).						
	AP	Choi, et al., "A 10 <sup>13</sup> A/s High Energy Density Micro Discharge Radiation Source," <u>B. Radiation Characteristics</u> , p. 287-290.						
	AQ	Choi, et al., "Fast pulsed hollow cathode capillary discharge device," <u>Rev. of Sci. Instrum.</u> 69(9):3118-3122 (1998).						
	AR	Feigl, et al., "Heat Resistance of EUV Multilayer Mirrors for Long-time Applications," <u>Microelectric Engineering</u> , 57-58:3-8, (2001).						
	AS	Fomenkov, et al., "Characterization of a 13.5nm Source for EUV Lithography based on a Dense Plasma Focus and Lithium Emission," <u>Sematech Intl. Workshop on EUV Lithography</u> (Oct. 1999).						
	AT	Hansson, et al., "Xenon liquid jet laser-plasma source for EUV lithography," <u>Emerging Lithographic Technologies IV, Proc. Of SPIE</u> , Vol. 3997:729-732 (2000).						
	AU	Kato, Yasuo, "Electrode Lifetimes in a Plasma Focus Soft X-Ray Source," <u>J. Appl. Phys.</u> (33) Pt. 1, No. 8:4742-4744 (1991).						
	AV	Kato, et al., "Plasma focus x-ray source for lithography," <u>Am. Vac. Sci. Tech. B.</u> , 6(1): 195-198 (1988).						
	AW	Lebert, et al., "Soft x-ray emission of laser-produced plasmas using a low-debris cryogenic nitrogen target," <u>J. App. Phys.</u> , 84(6):3419-3421 (1998).						
	AX	Lebert, et al., "A gas discharge based radiation source for EUV-lithography," <u>Intl. Conf. Micro and Nano-Engineering 98</u> (Sept. 22-24, 1998) Leuven, Belgium.						
	AY	Lebert, et al., "Investigation of pinch plasmas with plasma parameters promising ASE," <u>Inst. Phys. Conf. Ser No. 125: Section 9</u> , pp. 411-415 (1992) Schiersee, Germany.						
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	BB	Lewis, Ciaran L.S., "Status of Collision-Pumped X-ray Lasers," <u>Am Inst. Phys. Pp.</u> 9-16 (1994).						
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kn	BD	Mather, et al., "Stability of the Dense Plasma Focus," <u>Phys. Of Fluids</u> , 12(11):2343-2347 (1969).							
	BE	Mayo, et al., "A magnetized coaxial source facility for the generation of energetic plasma flows," <u>Sci. Technol.</u> Vol. 4:pp.47-55 (1994).							
	BF	Mayo, et al., "Initial Results on high enthalpy plasma generation in a magnetized coaxial source," <u>Fusion Tech</u> Vol. 26:1221-1225 (1994).							
	BG	Nilsen, et al., "Analysis of resonantly photopumped Na-Ne x-ray-laser scheme," <u>Am Phys. Soc.</u> 44(7):4591-4597 (1991).							
	BH	Partlo, et al., "EUV (13.5nm) Light Generation Using a Dense Plasma Focus Device," <u>SPIE Proc. On Emerging Lithographic Technologies III</u> , Vol. 3676, 846-858 (March 1999).							
	BI	Porter, et al., "Demonstration of Population Inversion by Resonant Photopumping in a Neon Gas Cell Irradiated by a Sodium Z Pinch," <u>Phys. Rev. Lett.</u> 68(6):796-799. (Feb. 1992).							
	BJ	Price, Robert H., "X-Ray Microscopy using Grazing Incidence Reflection Optics," <u>Am. Inst. Phys.</u> , pp. 189-199, (1981).							
	BK	Qi, et al., "Fluorescence in Mg IX emission at 48.340 Å from Mg pinch plasmas photopumped by Al XI line radiation at 48.338 Å," <u>The Am. Phys. Soc.</u> 47(3):2253-2263 (March 1993).							
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	BM	Schriever, et al., "Laser-produced lithium plasma as a narrow-band extended ultraviolet radiation source for photoelectron spectroscopy," <u>App. Optics</u> , 37(7):1243-1248. (Mar. 1998).							
	BN	Schriever, et al., "Narrowband laser produced extreme ultraviolet sources adapted to silicon/molybdenum multilayer optics," <u>J. of App. Phys.</u> , 83(9):4566-4571, (May 1998).							
	BO	Silfvast, et al., "High-power plasma discharge source at 13.5 nm and 11.4 nm for EUV lithography," <u>SPIE</u> , Vol. 3676:272-275, (Mar. 1999).							
	BP	Silfvast, et al., "Lithium hydride capillary discharge creates x-ray plasma at 13.5 nanometers," <u>Laser Focus World</u> , p. 13. (Mar. 1997).							
	BQ	Wilhein, et al., "A slit grating spectrograph for quantitative soft x-ray spectroscopy," <u>Am. Inst. Of Phys. Rev. of Sci Instrum</u> 70(3):1604-1609 (Mar 1999)							
	BR	Wu, et al., "The vacuum Spark and Spherical Pinch X-ray/EUV Point Sources," <u>SPIE, Conf. On Emerging Tech. III</u> , Santa Clara, CA, Vol. 3676:410-420. (Mar. 1999)							
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